AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A display device comprising:

a display area including a plurality of gate signal lines and a plurality of drain signal lines crossing the plurality of gate signal lines, and a plurality of pixel regions surrounding the plurality of gate signal lines and the plurality of drain signal lines;

a plurality of common counter voltage signal lines arranged in the respective pixel regions;

a pixel electrode and a counter electrode arranged in the respective pixel regions, and

~~including a pixel electrode to which~~wherein the display device supplies a video signal ~~is supplied~~ to the pixel electrode through each of the plurality of drain signal lines and ~~a counter electrode to which~~ said display device supplies a ~~counter~~ reference signal, which becomes a reference with respect to the video signal, ~~is supplied~~ to the counter electrode through each of the plurality of common counter voltage signal lines in each pixel, and

wherein the display device produces a positive-side gray scale voltage and a negative-side gray scale voltage ~~are formed~~ with respect to the reference signal applied to the counter electrode, and ~~such that~~

wherein the display device controls the average value of the positive-side gray scale voltage and the negative-side gray scale voltage such that:

(a) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is increased when ~~the~~a signal amplitude of the video signal falls in a range from a minimum value to a first value,

(b) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is decreased when the signal amplitude of the video signal falls in a range from the first value to a second value, and

(c) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is increased when the signal amplitude of the video signal falls in a range from the second value to a maximum value.

2. (Previously Presented) A display device according to claim 1, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage, with respect to the signal amplitude of the video signal, assumes an upper extreme value at a point where the average value changes from increasing values to decreasing values and a lower extreme value at a point where the average value changes from decreasing values to increasing values in the range from the minimum value to the maximum value of the signal amplitude of the video signal.

3. (Previously Presented) A display device according to claim 2, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage, with respect to the signal amplitude of the video signal, in the range of values between the lower extreme value and the upper extreme value, is changed monotonously.

4. (Previously Presented) A display device according to claim 2, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is changed monotonously from the value thereof at the minimum value of the signal amplitude of the video signal to said upper extreme value and from said lower extreme value thereof to the value thereof at the maximum value of the signal amplitude of the video signal.

5. (Previously Presented) A display device according to claim 4, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at the minimum signal amplitude of the video signal is smaller than the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at said lower extreme value.

6. (Previously Presented) A display device according to claim 4, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at the maximum signal amplitude of the video signal is larger than the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at said upper extreme value.

7. (Currently Amended) A display device comprising:

a display area including a plurality of gate signal lines and a plurality of drain signal lines crossing the plurality of gate signal lines, and a plurality of pixel regions surrounding the plurality of gate signal lines and the plurality of drain signal lines;

a plurality of common counter voltage signal lines arranged in the respective pixel regions;

a pixel electrode and a counter electrode arranged in the respective pixel regions, and

~~including a pixel electrode to which~~ wherein the display device supplies a video signal ~~is supplied~~ to the pixel electrode through each of the plurality of drain signal lines and ~~a counter electrode to which~~ the display device supplies a reference signal, which becomes a reference with respect to the video signal, ~~is supplied~~ to the counter electrode through each of the plurality of common counter voltage signal lines in each pixel,

wherein the display device produces a positive-side gray scale voltage and a negative-side gray scale voltage ~~are formed~~ with respect to the reference signal applied to the counter electrode, and ~~such that~~

wherein the display device controls the average value of the positive-side gray scale voltage and the negative-side gray scale voltage such that:

(a) ~~an~~ the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is increased when ~~the~~ a display gray scale of the video signal falls in a range from a minimum value to a first value,

(b) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is decreased when ~~the~~ a signal amplitude of the video signal falls in a range from the first value to a second value, and

(c) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is increased when the display gray scale of the video signal falls in a range from the second value to a maximum value.

8. (Previously Presented) A display device according to claim 7, wherein the average value of the positive-side gray scale voltage and the negative-side gray

scale voltage, with respect to the signal amplitude of the video signal, assumes an upper extreme value at a point where the average value changes from increasing values to decreasing values and a lower extreme value at a point where the average value changes from decreasing values to increasing values in the range from the minimum value to the maximum value of the display gray scale of the video signal.

9. (Previously Presented) A display device according to claim 8, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage, with respect to the signal amplitude of the video signal, in the range of values between the lower extreme value and the upper extreme value, is changed monotonously.

10. (Previously Presented) A display device according to claim 9, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at the minimum display gray scale of the video signal is smaller than the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at said lower extreme value.

11. (Previously Presented) A display device according to claim 9, wherein the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at the maximum display gray scale of the video signal is larger than the average value of the positive-side gray scale voltage and the negative-side gray scale voltage at said upper extreme value.

12. (Previously Presented) A display device according to claim 11, wherein the display device is driven in a normally white mode in which the minimum value of the display gray scale assumes a white display and the maximum value of the display gray scale assumes a black display.

13. (Previously Presented) A display device according to claim 11, wherein the display device is driven in a normally black mode in which the minimum value of the display gray scale assumes a black display and the maximum value of the display gray scale assumes a white display.

14. (Previously Presented) A display device according to claim 1, wherein a circuit which forms the respective gray scale voltages includes gray scale division resistances and the resistances are constituted of seven or more resistances.

15. (Previously Presented) A display device according to claim 14, wherein a resultant resistance of the gray scale resistances between positive-polarity voltage outputs is larger than a resultant resistance of the gray scale resistances between negative-polarity voltage outputs.

16. (Previously Presented) A display device according to claim 7, wherein a circuit which forms the respective gray scale voltages includes gray scale division resistances and the resistances are constituted of seven or more resistances.

17. (Previously Presented) A display device according to claim 16, wherein a resultant resistance of the gray scale voltages between positive-polarity outputs is

larger than a resultant resistance of the gray scale voltages between negative-polarity outputs.

18. (Currently Amended) A method of driving a display device which includes a pixel electrode to which a video signal is supplied and a counter electrode to which a reference signal, which becomes a reference with respect to the video signal, is supplied in each pixel, and wherein a positive-side gray scale voltage and a negative-side gray scale voltage are formed with respect to the reference signal applied to the counter electrode ~~such that~~, the method comprising the steps of:

(a) increasing an average value of the positive-side gray scale voltage and the negative-side gray scale voltage ~~is increased~~ when a signal amplitude of the video signal falls in a range from a minimum value to a first value,

(b) decreasing the average value of the positive-side gray scale voltage and the negative-side gray scale voltage ~~is decreased~~ when the signal amplitude of the video signal falls in a range from the first value to a second value, and

(c) increasing the average value of the positive-side gray scale voltage and the negative-side gray scale voltage ~~is increased~~ when the signal amplitude of the video signal falls in a range from the second value to a maximum value.